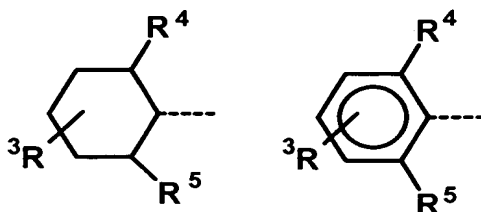


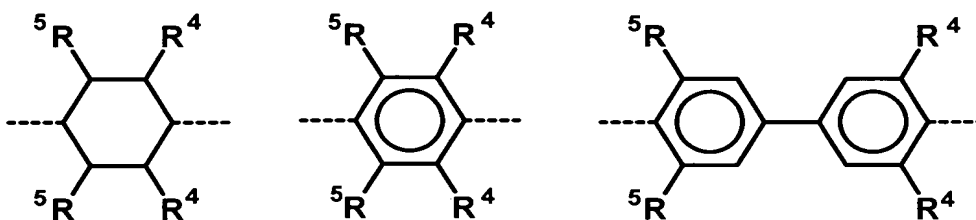
n is 1 or 2,

on the condition that

for  $n = 1$   $R^1$  has the meaning



and for  $n = 2$   $R^1$  has the meaning



$R^2$  is a  $C_1$  to  $C_{12}$  alkylene radical,  $C_4$ - $C_8$  cycloalkylene radical or  $C_7$  to  $C_{15}$  alkylene phenylene radical;

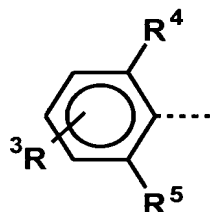
$R^3$  is hydrogen, a  $C_1$  to  $C_5$  alkyl radical or a  $C_1$  to  $C_5$  O-alkyl radical; and

$R^4, R^5$  independently of each other, each stand for a  $C_1$  to  $C_5$  alkyl radical or a  $C_1$  to  $C_5$  O-alkyl radical.

2. (previously presented) Acrylic ester phosphonic acid according to claim 1, wherein one or more of the variables of Formula (I), independently of each other, have the following meaning:

n = 1,

R<sup>1</sup> =



R<sup>2</sup> = a C<sub>1</sub> to C<sub>6</sub> alkylene radical;

R<sup>3</sup> = hydrogen, a C<sub>1</sub> to C<sub>3</sub> alkyl radical; and

R<sup>4</sup>, R<sup>5</sup> = independently of each other, a C<sub>1</sub> to C<sub>3</sub> alkyl radical.

3. (previously presented) Acrylic ester phosphonic acid according to claim 1 wherein the radicals R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and/or R<sup>5</sup> are unsubstituted or substituted by one or more substituents selected from the group Cl, Br, CH<sub>3</sub>O, OH, COOH, CN, =O, =S, =NR<sup>6</sup> or -NR<sup>7</sup>-CO-C(=CH<sub>2</sub>)CH<sub>2</sub>-Y-R<sup>8</sup>-PO(OH)<sub>2</sub>, wherein R<sup>6</sup> and R<sup>7</sup>, independently of each other, each stand for hydrogen, a straight-chained or branched C<sub>1</sub> to C<sub>10</sub> alkyl or C<sub>6</sub> to C<sub>10</sub> aryl radical and R<sup>8</sup> is a straight-chained or branched C<sub>1</sub> to C<sub>10</sub> alkylene or C<sub>6</sub> to C<sub>14</sub> arylene radical.

4. (previously presented) Composition containing an acrylic ester phosphonic acid according to claim 1.

5. (previously presented) Composition according to claim 4, further comprising a radically polymerizable monomer.

6. (previously presented) Composition according to claim 5, containing an acrylamide and/or a hydroxyalkyl acrylamide as a radically polymerizable monomer.

7. (previously presented) Composition according to claim 5, containing a monofunctional and/or a multifunctional radically polymerizable monomer.

8. (previously presented) Composition according to claim 7, containing as a monofunctional radically polymerizable monomer one or more hydrolysis-stable mono(meth)acrylates, mesityl methacrylate, one or more 2-(alkoxymethyl)acrylic acids, 2-

(ethoxymethyl)acrylic acid, 2-(hydroxymethyl)acrylic acid, one or more N-mono- or N-disubstituted acrylamides, N-ethylacrylamide, N,N-dimethacrylamide, N-(2-hydroxyethyl)acrylamide, N-(2-hydroxyethyl)-N-methyl-acrylamide, one or more N-monosubstituted methacrylamides, N-ethylmethacrylamide, N-(2-hydroxyethyl)methacrylamide, N-vinylpyrrolidone, allyl ether or a mixture of two or more of these monomers.

9. (previously presented) Composition according to claim 7, containing as a multifunctional radically polymerizable monomer one or more urethanes from 2-(hydroxymethyl)acrylic acid and diisocyanates, 2,2,4-trimethylhexamethylene diisocyanate, isophorone diisocyanate, one or more crosslinking pyrrolidones, 1,6-bis(3-vinyl-2-pyrrolidonyl)-hexane, one or more bisacrylamides, methylene bisacrylamide, ethylene bisacrylamide, one or more bis(meth)acrylamides, N,N'-diethyl-1,3-bis(acrylamido)-propane, 1,3-bis(methacrylamido)-propane, 1,4-bis(acrylamido)-butane, 1,4-bis(acryloyl)-piperazine or a mixture of two or more of these monomers.

10. (previously presented) Composition according to claim 9, further comprising an initiator for radical polymerization.

11. (previously presented) Composition according to claim 4, further containing a filler.

12. (previously presented) Composition according to claim 4, further comprising a solvent.

13. (previously presented) Composition according to claim 4, further comprising a (meth)acrylamidoalkyl dihydrogen phosphate.

14. (currently amended) Composition according to claim 4, containing
- a) 0.5 to 70 wt.-% of the acrylic ester phosphonic acid according to claim 1 or 2;
  - b) 0.01 to 15 wt.-% initiator for radical polymerization;
  - c) 0 to 80 wt.-% radically polymerizable monomer;

- d) 0 to 95 wt.-% solvent;
- e) 0 to 50 wt.-%, (meth)acrylamidoalkyl dihydrogen phosphate,  
and/or
- f) 0 to 75 wt.-% filler.

15. (previously presented) A dental material comprising a composition according to claim 4.

16. (previously presented) A cement or adhesive comprising a composition according to claim 4.

17. (previously presented) A dental material comprising an acrylic ester phosphonic acid according to claim 1.

18. (new) Composition containing an acrylic ester phosphonic acid according to claim 2.

19. (new) Composition according to claim 18, containing
- a) 0.5 to 70 wt.-% of the acrylic ester phosphonic acid;
  - b) 0.01 to 15 wt.-% initiator for radical polymerization;
  - c) 0 to 80 wt.-% radically polymerizable monomer;
  - d) 0 to 95 wt.-% solvent;
  - e) 0 to 50 wt.-%, (meth)acrylamidoalkyl dihydrogen phosphate,  
and/or
  - f) 0 to 75 wt.-% filler.